Comments to MPCA for the South Metro Mississippi River Total Suspended Solids Total Maximum Daily Load Draft Report open for comment February 27, 2012 to May 29, 2012

DRAFT – May 15, 2012

A. The focus of the TMDL should be totally on the Minnesota River Watershed.

Supporting information:

The draft TMDL Study addresses Submersed Aquatic Vegetation (SAV), which is affected when algae, suspended sediment, and organic matter in the water increase turbidity. The draft Study explains that it is the smaller sediment particles, referred to as the "cohesive class", that are the significant contributor to turbidity and therefore SAV.

The primary focus of the draft Study, however, appears to be the infilling of Lake Pepin. Prior to 1830 or the beginning of European settlement, over a period of 11,400 years "Lake Pepin" which is a natural impoundment of the river filled in with sediment between its current position and about what is now St. Paul. At that rate, it is estimated that the process would have resulted in complete filling in another 3,000 years were it not for human influences. Instead, the Study explains that the filling is at an accelerated rate - projected at 300 years -- because the geology of the Minnesota River, now coupled with land use changes, make it "prime to erode".

The Mississippi River upstream of the Minnesota River meets the water quality standard. As stated in the draft TMDL Study, water clarity is good in the uppermost segment of the South Metro Mississippi (Lock & Dam #1 to the confluence with the Minnesota River). "The river becomes suddenly turbid as it absorbs the heavy sediment load of the Minnesota River." The state standard is 64 mg/L TSS, and the site-specific standard for the South Metro Mississippi River is 32 mg/L TSS. The concentration at Anoka is 24 mg/L, well within both the state and the South Metro Mississippi River standards. The concentration at L&D #1 is even lower, at 20 mg/L, thus flow through Minneapolis is a diluting mechanism. If the Minnesota River met water quality standards there would not be a TSS impairment in the South Metro Mississippi River. The focus of the TMDL should be totally on the Minnesota River Watershed. "In fact, success of the TMDL will depend on achieving significant reductions in TSS from a few major subwatersheds in the Minnesota River Basin" (draft TMDL Study page 66).

Proposed change:

> The City proposes that the MPCA focus the TMDL for the South Metro Mississippi River impairment only on the Minnesota River Watershed.

B. If the Upper Mississippi upstream of L&D continues to be included in the TMDL Study:

The 25% reduction in Total Suspended Solids (TSS) by regulated MS4s is not warranted.

Supporting information:

The draft TMDL Study proposes requiring all local governments with an NPDES MS4 permit to reduce their contribution of TSS by 25%. The decision to require a 25% reduction by MS4s (and MS4s only) is arbitrary. It is not supported by scientific data. There is no showing that this 25% reduction by MS4s will make any significant contribution to reducing the elevated TSS levels in the impaired section of the river that is the subject of the TMDL requirement. Minnesota Statutes, Section 114D.25 says, "A TMDL must include a statement of the facts and scientific data supporting the TMDL [equation] . . .". MPCA staff has agreed that statements such as on page 56 – that "25 percent . . . represents the required reduction for this TMDL" – is incorrect because the 25 percent is not based on facts and scientific data.

The WLA for permitted MS4s is not supported by the Lake Pepin/Upper Mississippi River model report. MPCA staff has explained that the 25% reduction by MS4s is intended to satisfy possible equity issues.

A TMDL should have reasonable assurance of improving water quality and more importantly improving water quality to the extent that the subject water body can be removed from the list of impaired waters. The credibility of the TMDL hinges on following good science to actually improve the water quality of an impaired water body. For this TMDL Study, however, urban land uses are essentially irrelevant to the impairment and to potential removal of the water body from the list of impaired water bodies. It is being proposed that the MS4s spend $1 billion ($850 million for this TMDL and $175 million for the companion Minnesota River TMDL) to remove what appears to amount to 0.25% to 1.37% of the pollutant of concern, depending on which study and analysis of MS4 contribution is used (the draft TMDL Study sets urban runoff TSS at 5.5% of total TSS; other reports have arrived at lower percentages). Thus the proposed 25% reduction by MS4s at an estimated cost of $1 billion will not even cause an appreciable reduction of the impairment. Expenditures of $1 billion pursuant to the plan will not bring about any change that will be noticed either visually or in terms of physical effect on the environment. No amount of reduction by MS4s would. Spending public money to accomplish nothing is not good public policy.

The TMDL Study refers to unprecedented funding from the Minnesota Clean Water Fund. While unprecedented, the funds are not unlimited. The Clean Water Fund is supported by a sales tax that is applied statewide, including within MS4 jurisdictions, equitably distributing the sales tax burden . With the potential of billions of dollars at stake, we believe the MPCA should include cost-benefit analysis on behalf of efficiency for the State of Minnesota, even though not required by the USEPA. A cost-effective TMDL Study approach is owed to the taxpayers. It should concentrate on high-contributing sediment sources areas and be coupled with cost-effective solutions.

In addition to any money spent out of the Clean Water Fund, we can envision Minneapolis ratepayers spending tens of millions of dollars to accomplish nothing as in regards to improving the turbidity

problem in the South Metro Mississippi River. Meanwhile there is and will continue to be competition for Minneapolis dollars for BMPs and activities related to other TMDLs that are more directly associated with urban runoff and to maintain and improve our MS4 and its receiving waters.

The draft TMDL study underscores that urban runoff is a small portion of the pollutant load. However the proposed WLA would constitute a large legal mandate for cities, as Waste Load Allocations are enforceable under NPDES MS4 Permits.

Proposed change:

The City proposes that the MPCA make the following change.

MPCA has the authority to change the Waste Load Allocation for MS4s. The City proposes that the MPCA make the following change to the WLA for MS4s

a) Eliminate the 25% reduction for MS4s and instead focus on the most cost-effective measures for directly improving the impaired water body. (preferred)

b) Or set the reduction proportionate to the MS4 load. For example the Minnesota River contributes 75% of the load, and the recommended reduction is 60% of the 75%. An equitable reduction for MS4s would be 60% of the contribution which the draft TMDL Study estimates at 5.5%. A reduction of 60% of 5.5% is 3.3%, not 25%. (Other reports have estimated a much lower MS4 load, and additional work should be done by the MPCA to resolve this issue.)

C. If the reduction for regulated MS4s is not eliminated:

The proposed baseline of 2002 is unwarranted.

Supporting information:

A TMDL Study is required to have a clearly defined baseline. Examples are a specific year or a specific Best Management Practices (BMP) condition (Technical Guidance Used by MPCA to Develop Policies for Setting TMDL WLAs for Regulated Stormwater, page 21, MPCA August 2010). For a required reduction under an approved TMDL, to get credit for demonstrating compliance, an MS4 will be required to provide an accounting of BMPs undertaken after the baseline.

Using the year 2002 would penalize entities that have been undertaking water quality projects and programs for a very long time. This disincentive could necessitate waiting to carry out projects and programs until being required by regulation to do so, rather than being proactive stewards of water resources.

Rather than a specific year such as 2002, the preferred alternative is for MPCA to use a specific BMP condition which is consistent with the Technical Guidance referred to above. Thus a required reduction for MS4s can be from a "no BMPs" condition. This concept was the working concept for at least some of the stakeholder meetings, and would allow credit for all water quality projects.

Base years if needed are the earliest years from which the modelers took data as they created and calibrated the model. With little or no calibration for urban runoff, there are no data supporting the selection of 2002 as a base year upon which to base reduction requirements. The rationale expressed on page 57 of the draft TMDL Study is that 2002 corresponds to the 86th percentile flow condition used to calibrate the model. However selection of the base year for its flow characteristics is irrelevant , since urban runoff loadings do not fluctuate based on Mississippi River flow conditions.

Proposed change:

The City proposes that the MPCA make the following change.

a) Set the baseline as the "no BMPs" condition. (preferred) This means that the baseline conditions for the purposes of the TMDL should be the conditions that existed in an MS4 jurisdiction prior to the implementation of stormwater best management practices (BMPs) by the MS4 jurisdiction regardless of the date of formal permitting.

b) Or, set the baseline at 1985, the start of the period of monitoring data used for modeling. Minneapolis does not want to be penalized by disallowing past projects from counting toward compliance. As addressed earlier, selection of 1985 as the baseline does not compromise the TMDL.

D. Reasonable assurance of nonpoint source controls

Supporting information:
Reasonable assurance language is a requirement of the TMDL Study and is meant to ensure that the proposed pollutant loads are achievable, so that the proposed implementation will lead to removing the subject water body from the list of impaired water bodies. Due to the extreme contribution of pollutant loadings from unregulated nonpoint sources, there is not reasonable assurance in the draft TMDL Study that the proposed implementation of this TMDL is achievable.

This leads to an additional concern for MS4s. Page 82 of the draft TMDL Study states, "Contingency requirements for this TMDL will not include ratcheting down further on point sources by reducing their waste load allocations, be they permitted MS4s or permitted wastewater treatment facilities. As this document attests, these are very minor sources of sediment to the South Metro Mississippi River, and further reducing their waste load allocations will not help to accomplish the goals of the TMDL in any measurable way." This means that if after a period of time the nonpoint source targets have not been

met, the MPCA will not increase reduction requirements by the point sources, since it would not help to accomplish the goals of the TMDL in any measurable way. But the next section of the TMDL Study raises a concern about looking to MS4s for helping to fund nonpoint source targets. The language is this:

"Rather, contingency requirements to be implemented if nonpoint source targets are not met will focus on nonpoint sources themselves. They could take the form of:

- access to funding by local units of government . . ."
- (this is followed by other bullet points).

Does this first bullet point suggest that local units of government that are regulated MS4s could be required to fund reduction from nonpoint sources under this contingency?

Proposed change:

The City proposes that the MPCA make the following change. The bullet point "access to funding by local units of government" needs to be clarified that it does not mean required funding by regulated MS4s of non-WLA activities or activities outside their jurisdictions.

E. Additional comments:

1) There are ways that additional clarification of terminology and calculations would be very helpful.

1.a) Page 19 of the draft TMDL Study defines the "Upper Mississippi River Basin" for the purposes of this study as the land area that drains to Mississippi River Mile 871, near the Anoka dam, and page 28 uses the term "Metroshed" for the area that drains to the section of the river between River Miles 871 and 844. However as used in the document, "Upper Mississippi River" sometime includes, and sometimes does not include, the area in the "Metroshed". Please clarify throughout the document the intended area for use of the term "Upper Mississippi". Please include clarification of which category on Figure 7 includes the Metroshed.

1.b) A figure of $850 million is used as the projected cost of a 25% reduction by all regulated MS4s affected by this TMDL. This draft TMDL Study for the South Metro Mississippi River states that the companion draft TMDL, for the Minnesota River, will be more restrictive. The companion draft TMDL Study uses a figure of $175 million for regulated MS4s affected by that TMDL. The Minnesota River MS4s are affected by this TMDL as well. If the Minnesota River MS4s spend the $175 million to meet their Minnesota River TSS WLAs it appears they will have met the South Metro Mississippi River TSS WLAs as well. Therefore a question: Does the draft South Metro TMDL Study estimate of $850 million apply to MS4s including, or not including, the Minnesota River TMDLs? The relevance of this question is how to better understand cost implications for an MS4

outside of the Minnesota River drainage area, if one uses the $850 million estimate as a guide.

1.c) It would be helpful if the MS4 impervious acreage of all MS4s shown in Table 3 were broken down, at least by tributary.

1.d) Please clarify what is included in calculations for "MS4 Impervious Surfaces" and "MS4 Area (impervious and pervious areas)" on Table 3.

1.e) Please clarify what is included in calculations for the four bullets on page 56: "Developed, low intensity", "Developed, medium intensity", "Developed, high density", and Developed, open space".

1.f) More consistency of units would be helpful. The draft TMDL Study uses kilograms per day and metric tonnes per day. Metric tonnes per year are used, therefore consistent use of metric tonnes per day would be preferred.

2) The somewhat extensive public participation described in the draft Study was primarily related to the Lake Pepin TMDL. By comparison, the separate South Metro Mississippi River Turbidity TMDL had very little MS4 and other stakeholder involvement.

3) The draft TMDL Study states on page 6 that the Metropolitan Council began the separation of combined sanitary sewers and storm sewers in 1986. To clarify, what the Metropolitan Council began to do in 1986 was coordinate federal and state funding for an accelerated program in Minneapolis and other cities. Please add to the text that the City of Minneapolis began its separation in 1960.